AMENDMENT TO THE SPECIFICATION

Please amend the specification as follows:

Please replace paragraph 175 with the paragraph that follows:

Patient derived segments (2.5 kB envelope sequence amplification product) were inserted into HIV-1 envelope expression vectors using restriction endonuclease digestion, DNA ligation and bacterial transformation methods as described in U.S. Pat. No. 5,837,464 (International Publication Number WO 97/27319), with minor adaptations. The ~2.5 kB amplification product was digested with either Xho I or Pin AI at the 5' end and either Mlu I or Xba I at the 3' end. The resulting digestion products were ligated, using DNA ligase, into the 5' Xho I/Pin AI and 3' Mlu I/Xba I sites of modified pCXAS or pCXAS expression vectors. The construction of the pCXAS and pCXAT vectors was ~~has been~~ described ~~(in the CPT of base patent, I believe it was example 6 U.S. Pat. No.~~ in U.S. Pat. No. 5,837,464. ~~5,837,464 (International Publication Number WO 97/27319)).~~ Modified pCXAS and pCXAT vectors contain a Pin AI restriction site in addition to the Xho I, MluI and Xba I restriction sites that exist in pCXAS and pCXAT. The Pin AI site was introduced between the Xho I and Mlu I sites by site directed mutagenesis, such that the four sites are located 5' to 3' in the following order; Xho I, Pin AI, Mlu I and Xba I. In a preferred embodiment, the 2.5 kB amplification products were digested with Pin AI and Mlu I and ligated into the 5' Pin AI site and the 3' Mlu I site of the modified pCXAS expression vector. Ligation reaction products were used to transform E. coli. Following a 24-36 h incubation period at 30-37 °C, the expression vector plasmid DNA was purified from the E. coli cultures. To ensure that expression vector preparations adequately represents the HIV quasi-species present in the serum of a given patient, many (>100) independent E. coli transformants were pooled and used for the preparations of pHIVenv plasmid DNA. Vectors that are assembled in this manner for the purposes of expressing patient virus derived envelope proteins are collectively referred to as pHIVenv (FIGS. 1 and 3).